Filtrering og Analyse av Kartverkets Tilgjengelighetsdatabase Dokumentasjon

Release 0.1

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CHAPTER

ONE

FAKT

Dette prosjektet er gjort i sammarbeid med Statens kartver som en del av min master avhandling.

Tilleggsfunksjonen har som hensikt å gjøre det enklere å få tilgang til Kartverkets database for tilgjengelighet. Den er laget som en plugin til QGIS, slik at alle fylker har mulighet til å bruke den uten å betale for lisenser

English:

This project is made in association with the Norwegian Mapping Authority as a part of my master thesis.

The application is ment to make it easyer to access the Norwegian Mapping Authority database for universal design. It is made within QGIS so all countys in Norway can get access to the application without paying any license.

1.1 Innstalasjon

Dersom tilleggsfunksjonen er tilgjengelig i plugin mangaer, kan du åpne pluginmanager of søke etter tilgjengleighet. Klikk på tilleggsfunksjonen og installer Dersom tilleggsfunksjonen ikke er tilgjengleig i plugin manger, kan den lastes ned fra https://github.com/KaspArno/Tilgjengelighet. Unzip filen, og legge mappen i :/.qgis2/python/plugins. Sørg for at mappen heter Tilgjengelighet, og ikke git-Tilgjengelighet eller noe annet, og at alle filene og undermappene ligger i denne mappen, og ikke i noen undermapper. Du burde nå kunne finne tilleggsfunksjonen i plugin manager.

English:

If the plugin is availeble in plugin manager, then open plugin manager and search for tilgjengelighet. Click on the plugin and install If the plugin is not availeble in plugin manager, then you can download it from https://github.com/KaspArno/Tilgjengelighet. Download the file and unzip it in :/.qgis2/python/plugins. Make sure the folders name is Tilgjengelighet, and not git-Tilgjengleighet, ant that all files and dubfolders in in this filder. You should now be able to find it in plugin manager.

CHAPTER

TWO

FAKT - AUTOMATISK GENERERT DOKUMANTASJON

2.1 Tilgjengelighet

/***

Tilgjengelighet A QGIS plugin

My Tilgjengelighet assignment

begin : 2017-08-21 git sha : $Format:%H$ copyright : (C) 2017 by Kasper Skjeggestad email : kasper.skjeggestad@gmail.com

***/

/***

- –
- This program is free software; you can redistribute it and/or modify *
- it under the terms of the GNU General Public License as published by *
- the Free Software Foundation; either version 2 of the License, or *
- (at your option) any later version. *
- –

***/

class Tilgjengelighet.**Tilgjengelighet**(*iface*)

Bases: object

QGIS Plugin Implementation.

OpenBrowser()

Opens broeser to save file

addLayer(*layerType*)

The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

add_action(*icon_path*, *text*, *callback*, *enabled_flag=True*, *add_to_menu=True*, *add_to_toolbar=True*, *status_tip=None*, *whats_this=None*, *parent=None*)

Add a toolbar icon to the toolbar.

Parameters

- **icon_path** (*str*) – Path to the icon for this action. Can be a resource path (e.g. ':/plugins/foo/bar.png') or a normal file system path.

- **text** (*str*) – Text that should be shown in menu items for this action.
- **callback** (*function*) – Function to be called when the action is triggered.
- **enabled_flag** (*bool*) – A flag indicating if the action should be enabled by default. Defaults to True.
- **add_to_menu** (*bool*) – Flag indicating whether the action should also be added to the menu. Defaults to True.
- **add_to_toolbar** (*bool*) – Flag indicating whether the action should also be added to the toolbar. Defaults to True.
- **status_tip** (*str*) – Optional text to show in a popup when mouse pointer hovers over the action.
- **parent** (*QWidget*) – Parent widget for the new action. Defaults None.
- **whats_this** – Optional text to show in the status bar when the mouse pointer hovers over the action.

Returns The action that was created. Note that the action is also added to self.actions list.

Return type QAction

assign_combobox_baderampe()
Assigning a AttributeForm object to each option in Baderampe

assign_combobox_fiskeplass()
Assigning a AttributeForm object to each option in Baderampe

assign_combobox_hc_parkering()
Assigning a AttributeForm object to each option in hc parkering

assign_combobox_inngang()
Assigning a AttributeForm object to each option in inngang

assign_combobox_parkeringsomraade()
Assigning a AttributeForm object to each option in parkeringsområde

assign_combobox_vei()
Assigning a AttributeForm object to each option in vei

canvasCrs()
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

change_search_name()
Changes the name of search based on current tab and fyle and kommune

createGdalTmsLayer(*layerType*, *name*)
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

create_filter(*opperator*, *valueReference*, *value*)
creates FE based on input, made to take less space in other method create_filtherencoding

Parameters

- **opperator** (*str*) – opperator for FE
- **valueReference** (*str*) – name of attribute for FE
- **value** (*str*) – value for FE

create_filtherencoding(*attributeList*)
creates FE based on user choices

Parameters **attributeList** (*list<AttributeForms>*) – list of all attriubtes for filterencoding

Returns FilterEncoding

Return type str

excelSave()
obtaind from xytools, Saves features to excel format @author: Richard Duivenvoorde

fill_combobox(*combobox*, *filename*)
Fikks combobox with lines from filename

Parameters

- **combobox** (*QComboBox*) – The combobox to be filled
- **filename** (*str, QString*) – name of file with info to be filled in combobox

fill_fylker()
Fill up the combobox fylker with fylker from komm.txt

fill_infoWidget(*attributes*)
Filling infowidget with attributes name and no value. Also ajustes size of infowidget

Parameters **attributes** (*list<AttributeForms>*) – List of gui attriibutes

filtrer()
Makes FE and layer based on choises from user an current tab

fylke_valgt()
Fill up kommune combobox with kommune in chosen fylke

get_previus_search_activeLayer()
Open filtering window set to preweus choises

get_temppath(*filename*)
Creating a temperarly path for a temperary file

Parameters **filename** (*str, QString*) – String name for file

Returns string of full path

Return type str

hide_show_gui(*attributeForms*, *condition*, *extra=None*)
Shows parts of GUI if conditions are meat, hids it if not

Parameters

- **attributeForms** (*list<AttributeForm>*) – A list of witch attributes to hide in GUI
- **condition** (*boolean*) – The condition to show GUI parts
- **extra** (*list<QtWidgets>*) – include if gui consists of more than attributes that needs to be showed/hidden

highlightSelected()
Highlights the object viewed in infowidget

imageSave()
saves a screenshot of canvas

infoWidget_next()
shows next object in infoWidget

infoWidget_prev()
shows previus object in infoWidget

initGui()
Create the menu entries and toolbar icons inside the QGIS GUI.

kommune_valgt()
Alter the name on seach after a kommune is chosen

lagre_lag()
Saves layer as exported

obj_info()
Fills infowidget with info of current object

openLayer_background_init()
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

open_export_layer_dialog()
opens the excport gui

reset()
Resets the gui back to default

resolve(*basepath=None*)

run()
Run method that performs all the real work

savePath(*saveType*, *saveExtension*)
Find the save path

Parameters

- **saveType** (*str*) – The type of file to be saved
- **saveExtension** (*str*) – File extention (e.g .xls .png)

Returns direktory path and file namle

Return type (str,str)

save_search()
"Saves the search to search history so it can set choises in GUI bac to preveus desisions

selectedObjects(*selFeatures*)
changing number of selected objects in infowidget and settning current selected object

Parameters **selFeatures** – Selected features of layer

setMapCrs(*coordRefSys*)
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

setReferenceLayer(*layer*)
The folowing code has been taken out from OpenLayers Plugin writen by Sourcepole

show_message(*msg_text*, *msg_title=None*, *msg_info=None*, *msg_details=None*, *msg_type=None*)
Show the user a message :param msg_text: the tekst to show the user :type msg_text: str

Parameters

- **msg_title** (*str*) – the title of the message box
- **msg_info** (*str*) – additional info for the user
- **msg_details** (*str*) – details for the user

- **msg_type** (*QMessageBox.Icon*) – the type of message

show_tabell()
Shows or hide tableWidget

to_unicode(*in_string*)
Transforme string to unicode

Parameters **in_string** – String to transforme

Returns unicode verson of string

Return type unicode

tr(*message*)
Get the translation for a string using Qt translation API.

We implement this ourselves since we do not inherit QObject.

Parameters **message** (*str, QString*) – String for translation.

Returns Translated version of message.

Return type QString

unload()
Removes the plugin menu item and icon from QGIS GUI.

2.2 AttributeForm

class AttributeForm.**AttributeForm**(*attribute*, *comboBox=None*, *lineEdit=None*, *comboBoxText=None*, *label=None*)
Bases: object

Saves attributes and assosiated gui widgets

getAttribute()
Returns the assosiated attriubte name

Returns returns the associated attribute name

Return type str

getComboBox()
Returns the assosiated combobox widget

Returns returns the associated comboBox

Return type QComboBox

getComboBoxCurrentText()
Returns the assosoated combobox text

Returns returns the associated comboBox text, return None if no combobox is availeble

Return type QString

getLabel()
Returns the assisiated label widget if any :returns: returns the associated label :rtype: QLabel

getLineEdit()
Returns the assosiated lineEdit widget if any

Returns returns the associated lineEdit

Return type QLineEdit

getLineEditText()
Returns the lineEdit text

Returns returns the lineEdit text, return None if no lineEdit is availeble

Return type QString

is_number(*s*)
Sett text in AttributeForm lineEdit

Parameters **s** (*str*) – string to be change for being a number

Returns tru if s is number, false if s in not a number

Return type boolean

opperator()

Returns the opperator for attriubutt qury

Return type QString, None

reset()
Resets form to defult

setComboBox(*comboBox*)
Assigning comboBox

Parameters **comboBox** (*QComboBox*) – combobox assisiated to attribute

setLineEdit(*lineEdit*)
Assigning lineEdit

Parameters **lineEdit** (*QLineEdit*) – Linedit assisiated to attribute

setLineEditText(*string*)
Sett text in AttributeForm lineEdit

Parameters **string** (*str*) – String to set in lineEdit

valudeValid()
checks if the attribute is valid and search ready

Returns True if attrivute is valid, false if not

Return type boolean

value()
returns the value constraint, if alternative combobox is set, return that value, if lineedit, ruturn value freom line edit, else return from combobox

Returns the value constraint

Return type str

valueReference()
Returns the objekt attribute

Returns name of object attribute in database

Return type str

2.3 SavedSearch

class SavedSearch.**SavedSearch**(*search_name*, *layer*, *tabIndex_main*, *tabIndex_friluft*, *tabIndex_tettsted*)

Bases: object

Class made to save the choises made by user on a previus search

add_attribute(*attribute*, *current_index*, *current_lineText*)

Add attribute with current index for combobx and current text for lineText Attributes are stored in dictionarys as key, while value is list of combobox indes and lintEdtid text

Parameters

- **attribute** (AttributeForm) – one attribute from filter interface
- **current_index** (*int*) – index of combobx at search
- **current_lineText** (*str*) – text of lineEdit at search

get_attributes()

Returns dictionary of attributes

Returns dictionary of attributes

Return type list<AttributeForm>

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THREE

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